AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1-53 (Cancelled)

54. (Currently amended) The method of claim 53 81, wherein the

electromagnetic waves are laser light.

55. (Cancelled)

56. (Currently amended) The method of claim 55 75, wherein the temperature of

the first solvent and the temperature of the transport units applied to the

support is less than 50° C.

57. (Currently amended) The method of claim 55 75, wherein the substance

transport units having have a particle size in the range between 0.2 µm and

200 µm at a solid state of aggregation at a temperature of less than 90°C is

present in an immobilized state.

58. (Previously presented) The method of claim 57, wherein the temperature is

less than 50°C.

59. (Previously presented) The method of claim 57, wherein the particle size is between 2 μ m and 40 μ m.

60. (Currently amended) The method of claim 55 75, wherein the support is held at a temperature of at least 10 °C lower as compared to the temperature of the transport units until the start of the linking reaction of a monomer the substances to the molecules on -the support.

61. (Currently amended) The method of claim 55 <u>75</u>, wherein a locally precise transfer of substances takes place with the aid of a suitably modified printing method.

62. (Previously presented) The method of claim 61 wherein the printing method is carried out with one selected form the group consisting of a laser printer and a laser copier.

63. (Currently amended) The method of claim 55 <u>75</u>, wherein a locally precise transfer of substances takes place with the aid of a number of controllable light sources.

64. (Previously presented) The method of claim 63, wherein the light source is a light-emitting diode or micro laser.

65. (Cancelled)

66. (Currently amended) The method of claim 55 75, wherein the substances on

the support are cooled and deep-frozen.

67. (Currently amended) The method of claim 55 75, wherein the substance

substances contains contain at least one element or bind to such particles

that include an element selected from the group consisting of: magnetic

constituents; diphenyl formamide; preliminary stages for monomers, dimers

or trimers suitable for combinatorial synthesis; preliminary stages of D or L

amino acids, nucleosides or derivatized nucleosides or their mirror images

or their derivatives; polystyrene and cellulose.

68 (Previously presented) The method of claim 67, wherein the cellulose is

linked with one or several layers of monomers.

69. (Currently amended) The method of claim 55 <u>75</u>, further comprising the step

of, after a first cycle of linking reactions, detaching protective groups by

standard methods so as to form free amino- or hydroxyl groups for linkage

with preliminary stages of monomers, dimers.

70. (Currently amended) The method of claim 55 75, wherein the support used is one or more selected form the group consisting of polystyrene films,

paper, CDs, MODs, DVDs or FMDs.

71. (Currently amended) The method of claim 55 <u>75</u>, wherein the <u>transport units</u>

with immobilised substances are moved by means of applying an electrical

voltage or magnetic fields.

72-74 (Cancelled)

75. (New) A method for applying substances such as monomers to a support for

the combinatorial synthesis of molecule libraries, comprising the steps of:

first embedding at least two different substances in a matrix at a

temperature of less than 90° C provided in the form of a solvent that is in a

solid state of aggregation, thereby forming substances-immobilizing

transport units;

applying these transport units in the solid state of aggregation onto a

support at a temperature of less than 90° C;

wherein after application to the support, the transport units are

remaining in the solid state;

thereafter applying a physical process to the transport units for

mobilizing the substances and diffusing the substances within the solvent,

and

covalently linking the thus mobilized substances to molecules located on the support, or enter into a chemical reaction or catalyse the molecules thereby yielding a number of different substances coupled to the support;

repeating the forgoing steps until more than one layer of substances is applied to the support followed by a coupling of substances to the support in precise locations, in each case followed by the covalent linking of the substances to the support, and

washing away non-linked substances.

76. (New) The method of claim 75, further comprising the steps, after forming the transport units, of dissolving the transport units in a second solvent and then applying the transport units to the support in a liquid state of aggregation; thereafter vaporizing the second solvent completely until the transport units are taking on a solid state of aggregation.

77. (New) The method of claim 76, wherein the second solvent is isopropanol.

78. (New) The method of claim 75, wherein the temperature at the embedding step is in the range between -10°C and 80°C.

79. (New) The method of claim 78, wherein the range is between 0°C and 40°C.

80. (New) A method for applying substances such as monomers for the combinatorial synthesis to a support comprising the steps of:

positioning at different times transport units in a solid state of aggregation at different locations on the support, the transport units comprising immobilized monomers, wherein the transport units differ from each other by the substances immobilized within;

inducing a change in the state of aggregation in the immobilized monomers from solid to liquid to thereby effect a free diffusion of the substances on the substrate;

then coupling to the support at least two different of the so diffused

substances at the same time in one single combinatorial synthesis by means

of reactive groups on the support;

repeating the steps to generate a library of different molecules at

different positions.

81. (New) The method of claim 80, wherein the substances in the transport units

in their immobilized state are blocked from reacting with the reactive groups

on the solid support.

82. (New) The method of claim 80, wherein the monomers for the combinatorial

synthesis array are peptides or nucleic acids for forming a patterned

deposition of peptide or nucleic acid monomers on the support.

83. (New) A method for the combinatorial synthesis of peptide or nucleic acid

arrays comprising:

positioning at different times a pattern of different immobilized peptide

or nucleic acid monomers in the form of transport units at a solid state of

aggregation to a support, which transport units differ from each other by the

monomers immobilized within; wherein the immobilized peptide or nucleic

acid monomers are temporarily blocking a coupling reaction of the

monomers to the support by the reversibly immobilized monomers;

inducing a change in the transport units form the solid state of aggregation to a liquid state of aggregation, thereby permitting a free diffusion of the monomers;

then carrying out a coupling reaction to couple at least two different of the monomers to the support at the same time in one single combinatorial synthesis.